

**Summary of Comments Received and WDNR Responses
for
Final Draft Agreement
Between Madison Gas and Electric Company (MGE) and
Wisconsin Department of Natural Resources (WDNR):**

A. Comments Resulting in Changes to the Agreement

Definitions

- 1) Several environmental groups indicated that the Agreement must define PDF and applicable regulations. To the best of our understanding it should state something like the following:

"PDF includes paper and polyester industrial waste streams from off-spec waste streams. In the past MGE has burned as fuel a PDF laminated waste including printing, film and packaging laminates. Existing air permits include a standard for chlorine that is not changed by this new Cooperative Agreement."

We further request that the CEAG be provided with a copy of the waste stream characteristics of these PDF fuels so that they are aware of the type of emissions and residues that might be involved.

WDNR Response: Use of the term PDF has been clarified in several areas of the agreement, but not the definitions section. A firm "definition" of PDF will not be created because that might limit consideration of future waste streams. A primary goal of the pilot program is to promote, rather than restrict, operational flexibility. The agreement will briefly note that PDF is not given any special treatment by WDNR – it is subject to all applicable air pollution control requirements. MGE has already provided CEAG members with a wealth of information about PDF, including chemical characteristics, and will continue to do so.

Approvals Covered

- 2) **Comment:** Several environmental groups indicated support for the regulatory relief of Tier 3 instead of Tier 2 Storm Water Discharge requirements on condition that MGE complies with the Storm Water Pollution Prevention Plan (SWPPP) that it has already prepared.

WDNR Response: A sentence has been added to the final agreement explaining that MGE will continue implementing the SWPPP, but adherence to the SWPPP becomes voluntary once the Tier 3 permit is issued, and compliance determinations will be based solely on the conditions of the Tier 3 permit.

Commitment to Superior Environmental Performance

- 3) **Comment:** Decade, Sierra Club and RENEW have carefully reviewed and critiqued the proposed Environmental Cooperative Agreement (ECA) for Blount Street Generating Station (Blount) and found it lacking significant environmental benefits that do not warrant the delegation of regulatory flexibility. For this reason, we do not support the ECA.

To gain the support of Wisconsin's Environmental Decade, the Sierra Club-John Muir Chapter and RENEW, the Cooperative Agreement between MGE and WDNR needs to state clear measurable goals that are aggressive in protecting public health and the environment through pollution reduction, energy efficiency and conservation. We are particularly interested in the following "stretch" goals:

- MGE must document the baseline of emissions of current coal and alternative fuels, per MMBtu, for example.
- MGE must give special attention to reducing the pollutants likely to have the greatest neighborhood impacts – dioxin, particulates and SO₂ and NO_x emissions.
- MGE must commit that air pollution at Blount will decrease in absolute terms (even if generation increases) as well as per unit of energy generated.
 - a. We suggest benchmarks of 10% reduction of Criteria Pollutants (carbon monoxide, nitrogen oxides, particulates, sulfur dioxide and volatile organic compounds) in two years and 20% by five years.
 - b. We suggest benchmarks of 20% of all Trace Metals, except Antimony and Copper, in two years and 30% in five years.
 - c. We suggest benchmarks of 5% reduction in Antimony and Copper in two years and 10% reduction in five years, in view of preliminary WDNR analysis that indicates there may be an increase in these metals due to replacement of coal with industrial paper/poly waste (called "PDF").
 - d. We suggest benchmarks of 20% reduction in the Acid Gases Phosphoric Acid and Sulfuric Acid in two years and 30% in five years. Since there may be increases related to alternative fuels, the benchmarks for the Acid Gases Hydrogen Chloride and Hydrogen Fluoride are 5% reduction in two years and 10% reduction in five years.
 - e. We suggest benchmarks of 20% reduction in Coal Dust and Dioxin in two years and 30% in five years.
- For SO₂ and NO_x emissions, it is imperative to set aggressive reduction targets to greatly reduce health impacts (deaths). Since this agreement extends the life of Blount – a grandfathered plant – it must reduce these emissions by 25% in two years and 50% in 5 years. Potential co-benefits of such reductions may be decreased in acid gases (see above).
- These stretch goals will require less use of coal, a switch of coal source (such as from Midwestern high sulfur coal to low sulfur coal) and increased use of PDF and switch grass.
- MGE must commit to increase use of alternate fuels for boilers combusting coal to at least 25% by heat content (page 5, IX.A.1. Cooperative Agreement) within five years. We suggest an interim benchmark of 10% in two years.
 - a. Switch grass is a permitted fuel and yet it is not being used. The results of previous switch grass burning should be provided to the CEAG for discussion and determination of viability of future switch grass utilization.
 - b. Two additional forms of PDF are included in the Cooperative Agreement. The analysis required under VI.B.1.b. should be provided to the CEAG for discussion and determination of what new or increased emissions can be expected before use.
 - c. The Cooperative Agreement includes a useful set of review criteria for additional PDF waste streams (VI.B.1.b.).
- In order to control for de novo production of dioxin, the Agreement should include that MGE is responsible for controlling the combustion parameters (oxygen, fuel and temperature) that are critical to dioxin production. Specifically the CEAG should be

provided with the analysis of dioxin formation in the flue gases that MGE has certainly already performed. WDNR can then model the potential for deposition on the residential neighborhoods, public recreational areas, agricultural lands, dairy operations, and natural resources of Dane County. Any tradeoffs between energy production and dioxin production, or other tradeoffs, should be discussed with the CEAG so that the public is made aware of these tradeoffs.

WDNR Response: Regarding the specific reduction targets suggested, MGE and WDNR feel that further analysis of the technological and economic feasibility of various options is needed before appropriate reduction levels can be established. As a result, the final agreement includes a new commitment (IX.A.6.) by MGE to quickly produce a comprehensive analysis of reasonably available options for further reducing air emissions. This represents a significant new voluntary environmental commitment by MGE that strengthens the cooperative agreement and should serve to build trust among MGE, WDNR, the CEAG, and the public. Other commitments that were already in the agreement are also expected to lead to improvements in air emissions. Furthermore, MGE's EMS will serve on an ongoing basis to identify the most significant impacts of the company's operations and it will drive continual improvement in those areas. The cooperative agreement does not exempt MGE from any emission limits or control requirements for any air contaminant. It should also be noted as a final point that the agreement does not in any way extend the life of the Blount Street plant, as suggested in the comment.

Operational Flexibility and Variances

- 4) **Comment:** Point 9 should be reworded. As we understand it, MGE wishes the opacity monitoring requirements waived when the opacity monitors need to be serviced. As written, the variance is much, much too broad.

WDNR Response: The final agreement clarifies that monitoring is waived only if an opacity monitor is being serviced and the unit is burning natural gas.

- 5) **Comment:** Point 11 is totally unclear. Please add the specific type of monitoring.

WDNR Response: The point refers to monitoring required by the air pollution control operation permit (#113004430-P01) for Blount. This will be clarified in the final agreement.

Other

- 6) **Comment:** Under Addresses, please include telephone numbers and email addresses.

WDNR Response: Done.

B. Other Comments That Did Not Result in Changes to the Agreement

Facility Information (Scope)

- 1) **Comment:** The agreement should be extended to all MGE's power generating facilities. If an approach of looking overall at a lot of issues, for the purposes of granting MGE operational flexibility while not increasing emissions (and while agreeing to beneficial voluntary

actions), is workable for Blount Street, it makes sense to do this for all MGE's operations, including their MANY diesels.

WDNR Response: MGE chose to initially limit the scope of their voluntary innovation efforts to Blount Street. At the urging of CEAG members, MGE agreed to somewhat expand that scope but to keep the focus primarily on Blount. It should be further noted that MGE has specifically committed in item IX.A.5. to propose a research and testing program for reducing emissions from the backup diesel generators referred to in this comment.

- 2) **Comment:** Blount cannot be considered in a vacuum. MGE is planning a co-generation facility on the UW Campus. There are several common issues. The techniques envisioned for the UW plant which deal with thermal waste heat discharges to Lake Mendota would be useful to explain to and discuss with the CEAG for the transferability to the Blount Lake Monona situation. The cogeneration ideas might be useful for developing a marketing plan for attracting an industry to the East Rail Corridor for economic development or for working with the nearby State distribution system.

WDNR Response: These are good ideas but none of them require a change to the agreement. Issues such as those mentioned are discussed at CEAG meetings on a regular basis.

Definitions

- 3) **Comment:** In Section II.C. revise the definition of an Environmental Management System to be aligned with that in ISO 14001.

WDNR Response: The definition in the agreement is taken verbatim from s. 299.80, Wis. Stats., which is the law that authorizes WDNR to enter into cooperative agreements. The definition of EMS won't be changed because that would cause the agreement to conflict with the statute.

Approvals Covered

- 4) Several environmental groups indicated support for the streamlined review of PDF using the specified review process and with the opportunity on a case-by-case for WDNR to require stack testing (VI.B.1.b.). They also indicated support for the approval of non-industrial solid waste and PDF materials at Blount as long as they do not contribute to increased emissions. They agree that these uses shall not subject Blount to municipal waste combustor licensing.

WDNR Response: DNR and MGE agree with the principle behind this comment, so long as it isn't suggesting that PDF emissions must be lower than coal emissions for every possible air pollutant. (Even natural gas, which is often promoted by environmental groups as a cleaner alternative to coal, could not meet such a high standard because carbon monoxide emissions are higher from natural gas than from coal). On balance, DNR, MGE, and the CEAG supported increasing the use of PDF because an extensive analysis led us to conclude that it would provide a net overall benefit to air quality. Our analysis shows that increased use of PDF may lead to an increase in emissions of 4 air pollutants, but is likely to also lead to a decrease in emissions of 19 other air pollutants. The analysis also shows that public health and the environment will not be jeopardized by the potential increase in emissions of the 4 pollutants; such emissions will still comply with all applicable regulations.

Interested Persons Group

- 5) The Decade, Sierra Club and RENEW have worked on a wide variety of energy conservation and efficiency programs with MGE and have always appreciated the assistance and enjoyed a good working relationship with MGE. We are impressed with the work of MGE with their Community Environmental Advisory Group (CEAG). The MGE website provides useful information to the community on energy conservation and community initiatives by MGE as well as the work of the CEAG. This is a good model for other ECPP participants. Since we used the minutes of the CEAG as background, it is unfortunate that the minutes of the last two CEAG meetings (the only meetings held in 2002) were not posted, even if marked "Draft."

WDNR Response: CEAG members established in ground rules that draft meeting minutes would not be posted. Any change to these ground rules would have to be approved by CEAG members. CEAG members will see this Summary of Comments document and may choose to revise ground rules, but that is up to them.

- 6) **Comment:** In Appendix A, a logical group to be a part of the CEAG would be Sustain Dane. Only problem is that MGE funds Sustain Dane. So either it's a conflict of interest for Sustain Dane to be in the CEAG, or there should at least be some clarity about the purposes of MGE's funding of Sustain Dane, and some explanation of how it's not a conflict. This test or this issue applies to any group that would be part of the CEAG.

WDNR Response: MGE is striving to maintain a balance of interests on the CEAG while keeping the group manageably small in size. CEAG members are intended to represent important and distinct perspectives in the community that MGE serves, including economic, social, and environmental perspectives. MGE believes that the sustainability perspective is already represented on the CEAG.

- 7) **Comment:** In Appendix A, please add under Meeting Logistics: "6. All agendas, minutes and meeting handouts will be posted to the MGE website in a timely manner."

WDNR Response: Most materials are posted on the web site expeditiously, once they are in a final form. Some handouts shared with the CEAG are draft materials. Other materials are not easily converted to a web format. But more importantly, CEAG members have established ground rules for meetings and for posting of minutes, etc. to the web site. One of the ground rules is that draft materials will not be posted; another is that meeting minutes are considered draft until the CEAG approves them. MGE adheres to those ground rules. CEAG members are free to address this suggestion if they choose; however, WDNR and MGE do not want to interfere with this CEAG ground rule.

Commitment to Environmental Management System

- 8) **Comment:** Section V should be revised as follows: "Within [TWO YEARS AFTER DATE OF SIGNING] the company will provide objective evidence suitable to the department that the existing environmental management system (EMS) for BGS is comparable to the requirements of ISO 14001. Elements of the EMS that directly support implementation of this agreement shall be implemented as soon as practicable given resource constraints. Readily available data on this EMS shall be reported by MGE to the National Database on Environmental Management Systems developed by The Environmental Law Institute and the University of North Carolina."

WDNR Response: MGE has not ruled out the possibility of seeking third party certification of their EMS to the ISO 14001 standard. Such certification would definitely constitute the kind of objective evidence this comment suggests. But in the absence of third party certification, MGE and WDNR believe that the performance evaluations and reports required under section XIII of the cooperative agreement can serve as objective evidence that MGE has a credible EMS meeting the requirements of the pilot program. WDNR also intends to bring this comment before the pilot program's external advisory group for further discussion.

Commitment to Superior Environmental Performance

- 9) **Comment:** Several environmental groups indicated support for the five points included under Air Pollution Control (No.8 Boiler, pulvers, biodiesel fuel, registering Voluntary Emissions Reduction and backup generator emission reductions), the six points under Solid Waste Management (diverting landfill wastes as a fuel source, increased beneficial reuse of combustion byproducts, voluntary mercury product collections, mercury equipment management, PCB transformer management, and additional hazardous waste minimization and prevention activities), and point one under Wastewater Discharge Elimination.

WDNR Response: N/A.

- 10) **Comment:** Environmental groups indicated that before they could support the reburn of bottom ash from Charter Street at Blount, they, and the CEAG, need to see the concentrations of trace metals in the ash/fuel. If approved, additional monitoring/testing modeled on the ECPP with WEPCo at Pleasant Prairie Power Plant needs to be specified.

WDNR Response: The comment is reasonable but does not necessitate a change to the agreement. The agreement proposes a study of the potential to use Charter Street ash. The agreement does not pre-approve or authorize such use. Such a study would include an analysis of trace metal concentrations and would be shared with CEAG. Any use of ash as a fuel would have to be approved by WDNR after a thorough review of environmental impacts and regulatory implications.

- 11) **Comment:** Several environmental groups stated that point two under Wastewater Discharge Elimination -- thermal discharge -- must be dealt with as a commitment. MGE must commit to reduce thermal discharge pollution to Lake Monona. We suggest benchmarks of 10% reduction in heat per volume of discharge water in two years and 20% in five years. Since thermal pollution is more adverse at specific times in the spawning and growth cycle of fish, we suggest that the reductions be an annual average reduction with greater reductions during the sensitive time periods.

WDNR Response: MGE wants to find a way to reduce thermal discharge, but because of the plant's design it will be very difficult to meet the suggested targets. One promising possibility is to convert Blount Street to a cogeneration facility, where excess heat would be captured for use instead of discharged into Lake Monona. At this time there is insufficient information to know if such a conversion is feasible. MGE is committing via this agreement to study cogeneration and other possibilities, but the company simply cannot commit to the suggested targets at this time.

- 12) **Comment:** The ECA includes a feasibility study for a co-generation project at Blount. Several environmental groups indicated support for combined heat and power facilities but not if New Source Review (NSR) needs to be waived.

WDNR Response: The agreement doesn't waive New Source Review under any circumstances.

- 13) **Comment:** The ECA includes a procedure to deal with noise. The adequacy of this procedure to meet neighbors' needs should be monitored by the CEAG.

WDNR Response: The ECA already states that MGE will work with CEAG on this procedure and it states that CEAG will be involved in monitoring MGE's performance under the terms of the agreement.

Operational Flexibility and Variances

- 14) **Comment:** Several environmental groups indicated support for points 1-8 and 12 under Air Pollution Control. They also indicated that the points under Solid Waste Management, Wastewater Discharge Elimination and Other appear acceptable.

WDNR Response: N/A.

- 15) **Comment:** Point 13 waiving coal pile spraying is not acceptable. Even with the wall, coal dust is a neighborhood concern. Trading a wall for a dusty coal pile still subject to wind erosion is not acceptable. MGE must commit to continuing operational dust suppression. We appreciate the installation of the 30-ft wall at the coal pile. But the coal pile is still open to the wind and wind erosion to the neighborhood. Operational dust suppression will further reduce coal dust from the open pile, train cars and moving coal. Coal dust is being added to the NR 445 revisions because of health considerations. Air pollution improvement is a direct benefit to neighbors.

WDNR Response: WDNR is not aware of a single problem or complaint regarding coal dust from Blount Street that has arisen since the wall was constructed. By all accounts, the wall, enclosed coal conveyor, and upgraded ash handling system have been extremely effective. Spraying the coal pile requires significant effort by MGE but does not, in the judgment of WDNR and MGE personnel, add any meaningful protection against fugitive dust. Furthermore, the agreement is careful to state that this waiver will be suspended and spraying will resume if the other dust prevention methods are discovered to be inadequate.

- 16) **Comment:** It appears that WDNR strikes an appropriate balance in permitting MGE to undertake a trial burn. The CA authorizes MGE to begin burning "any paper/poly non-industrial waste previously approved by WDNR or approved in accordance with the process described in Section VI.B [of the CA]." We understand that WDNR is offering MGE an appropriate enforcement deferral for a reasonable time period to conduct a trial burn consistent with what WDNR would grant any approved applicant under its authorized procedures for trial burns. This is not to say that MGE would be permitted to burn any unauthorized materials, or to significantly exceed emission limitations or other applicable environmental requirements. Thus, we would expect MGE to conduct its operation reasonably, just as would any other company that was permitted to conduct such a trial burn.

Because the CA does not specifically state the precise modifications to be made to the Title V or WPDES permits for MGE, EPA and WDNR are in the process of determining whether or not the public notice and comment process being implemented by WDNR meets state and federal requirements for public notice regarding permit modifications. It is possible that a second public notice period will be required once the changes to the permit modification are discussed in greater detail.

WDNR Response: The agreement does not in any way relax the applicable emission limits or control requirements with which MGE must comply when burning alternative fuels. The agreement itself underwent a public notice and comment process dictated by s. 299.80, Wis. Stats., which WDNR believes is comparable to the process required for permit modifications. If and when the Title V or WPDES permits for Blount Street are next modified or renewed, WDNR intends to evaluate the need for including the terms of this agreement in the modified permits. Further consultation between WDNR and EPA will inform such decisions.

Reporting of Violations

17) **Comment:** Please add, “disclosed to WDNR and the CEAG.”

WDNR Response: This section of the agreement uses standard language common to other cooperative agreements. For the sake of consistency, this language will not be changed. The next section of the agreement (Baseline and Periodic Performance Evaluations), however, clearly indicates that CEAG members will receive a report summarizing each performance evaluation. Those reports will include disclosure of any violations found.

18) **Comment:** This CA does not exempt MGE from responsibility for complying with all requirements of the Clean Air Act, Clean Water Act, RCRA, any other Federal Environmental Statute or Regulation, or any state law implementing these programs, or any administrative order or permit issued pursuant thereto. EPA reserves its rights in appropriate circumstances to bring an enforcement action against MGE for violation of a requirement of any federally delegated or authorized program.

Section XII of the CA sets forth the terms of an enforcement deferral that will be afforded to MGE under certain circumstances. The scope of enforcement deferral provided in Section XII must be consistent with that provided by Wis. Stats. § 299.80(14), as interpreted by the Wisconsin Attorney General. Section 299.80(14) does not apply to violations identified through a monitoring or sampling procedure required by state or federal statute, regulation, permit, judicial or administrative order, or consent agreement. Also, the scope of the enforcement deferral provided by Section 299.80(14) is limited only to environmental law violations that may occur as a result of carrying out the specific provisions of a CA between a company and WDNR. The enforcement deferral does not apply to other violations, in particular those unrelated to carrying out the provisions of a CA.

WDNR Response: The agreement does not in any way relieve MGE from responsibility for complying with laws, regulations, etc., nor does it limit EPA's authority to bring enforcement actions for violations. WDNR will address any violations reported by MGE in strict accordance with all applicable laws, including s. 299.80(14), Wis. Stats.

Baseline and Periodic Performance Evaluations

- 19) **Comment:** Section XIII should include a reference to the requirement to provide the department with suitable objective evidence of an EMS described in Section V of the agreement.

WDNR Response: Refer to the response to comment #8 above.

Other

- 20) **Comment:** Blount is a dirty plant burning dirty coal. Blount has the highest pounds per million (MM) Btu of sulfur dioxide (SO₂) emissions of Wisconsin utilities (from "2000 Wisconsin Sulfur Dioxide and Nitrogen Oxides Emissions Report", by WDNR, August 2002, Publ AM-324 2002). A simple example based on this chart shows how dirty Blount is compared with other utility facilities. Blount produced 2,057 tons of SO₂ pollution in a highly urbanized area but only generated about 210 million kilowatt hours (kWh) of energy, while a unit producing a comparable amount of pollution, WI Public Service Corporation facility Weston Unit 2, produced 2,120 tons of SO₂ in a rural area but generated about 730 million kilowatt hours (kWh) of energy. (Heat input times 34% equals approximate energy generation). Not only was the energy produced almost 3.5 times less but the heavier pollution affected a more dense population.

Fine particle pollutants from coal-burning power plants shorten the lives of 448 people in Wisconsin and 30,100 nationwide each year, according to Abt Associates, the consultant used by US EPA. Abt Associates determined that 28 deaths occur in Madison WI from fine particle pollution from SO₂ and NO_x emissions, second only to Milwaukee in the number of such deaths. The Decade released the report "Death, Disease and Dirty Power" summarizing this data in October 2000. (See news article, Wisconsin State Journal, Oct. 18, 2000. The full report is available from the Decade.)

WDNR Response: The cooperative agreement will lead to improvements in overall environmental performance at Blount, over and above regulatory requirements, including air emission requirements. It includes commitments by MGE to install new equipment that should improve the performance of an existing pollution control device, to analyze options for reducing criteria pollutant emissions, and to study ways to improve combustion efficiency. SO₂ emissions from PDF are lower than SO₂ emissions from coal, which is one of the arguments for signing an agreement that allows MGE to increase the use of PDF at Blount. Without a cooperative agreement, WDNR and the public have no guarantee that any of these voluntary actions will take place.